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Tinopal® CBS-X

Fluorescent Whitening Agent for Laundry Products

Characterization	Fluorescent Whitening Agent for incorporation in detergents, giving brilliant white effects on cellulosic fibers over the whole temperature range, especially from cold to medium working temperatures.
Chemical nature	4,4'-Distyryl biphenyl derivative (DSBP)
PRD-No.*	30475071 * BASF's commercial product numbers.
Applications	Tinopal CBS-X is equally suitable for incorporation in conventional or compact washing powders, liquid detergents, industrial detergents, detergent bars, washing creams, after rinse softeners, soaps and boosters due to its very good stability and solubility.
Features/benefits	<p>Improved detergent aspect Tinopal CBS-X significantly improves the shade consistency and white appearance of detergents such as conventional and compact powders, soaps, liquid detergents and softeners.</p> <p>High whiteness delivery Tinopal CBS-X yields intense white effects on cellulosic fibers over the whole temperature range, i. e. from cold to hot washings.</p> <p>Excellent cold wash performance Tinopal CBS-X incorporated in detergents is highly soluble in water at low temperatures and yields therefore high white effects even at low washing temperatures and short washing times.</p> <p>Very good leveling properties Due to its good solubility, Tinopal CBS-X demonstrates very good leveling properties: This is an important factor with compact powders and direct dosing.</p> <p>Improved stability Tinopal CBS-X is stable against bleaching agents such as hypochlorite and peroxide and also to alkali, acids and perspiration.</p> <p>Improved light fastness Tinopal CBS-X exhibits very good wet and dry light fastness. Ensures whiteness consistency even when washing is dried outside.</p> <p>Low spotting Due to its good leveling properties Tinopal CBS-X is a low spotting FWA. A critical factor for compact and liquid detergents.</p> <p>Shade consistency Even on repeated washing Tinopal CBS-X delivers an intense whiteness on cellulosic fibers without greening. In other words, white stays whiter longer.</p> <p>Easy dosing Tinopal CBS-X consists of free flowing granules that facilitate dosing during detergent manufacturing and maintains plant cleanliness due to very low dusting.</p>

Guidelines for use

Tinopal CBS-X can be easily processed by any method of incorporation such as spray-drying, agglomerating, post blending and spray blending.

The recommended areas of application for Tinopal CBS-X are summarized below together with incorporation levels based on detergent weight.

Conventional detergent powders	0.05 – 0.25%
Compact detergent powders	0.10 – 0.40%
Unstructured liquid detergent	0.05 – 0.40%
Structured liquid detergents	0.05 – 0.15%
Anhydrous liquid detergents	0.10 – 0.40%
Detergent bars	0.05 – 0.15%
Soap bars	0.02 – 0.05%
Industrial detergents	0.20 – 1.00%
Rinse softeners	0.02 – 0.05%
Boosters	0.20 – 1.00%
Creams	0.05 – 0.15%

Physical Properties

Physical form	Medium fine, free-flowing, no-dusting, non friable granules
Color	Yellowish
Active content	90% ± 3%
UV/Vis Absorbance	1143 ± 38 (1% dilution, 1 cm, dist. Water, 349 nm)

Packaging

Available in 25 kg and 500 kg.

Handling & Safety

Since Tinopal CBS-X is highly efficient, it can be incorporated into laundry detergents at lower active concentrations than conventional FWAs. Extensive tests carried out to date have shown that at the concentrations indicated in this circular, Tinopal CBS-X can be used without hazard for the recommended applications. Tinopal CBS-X has been found to be degradable in the aquatic environment. Tinopal CBS-X undergoes rapid photo degradation and forms metabolites that are readily biodegradable.

In accordance with good industrial practice, handle with care and prevent contamination of the environment. For more detailed information please refer to the material safety data sheet.

Note

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